UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,149	11/27/2001	Jarrett E. Archer	RIC00007	9925

25537	7590	06/26/2006

VERIZON
PATENT MANAGEMENT GROUP
1515 N. COURTHOUSE ROAD
SUITE 500
ARLINGTON, VA 22201-2909

EXAMINER
HO, CHUONG T

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 06/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary	**Application No.** 09/995,149	**Applicant(s)** ARCHER ET AL.	
	Examiner CHUONG T. HO	**Art Unit** 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>10 April 2006</u>.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>26-54</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>26-54</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>27 November 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

1.   The amendment filed 04/10/06 have been entered and made of record.

2.   Applicant's arguments with respect to claims 26-28, 29-34, 35-39, 40-44, 45-50,

51-54 have been considered but are moot in view of the new ground(s) of rejection.

3.   Claims 26-28, 29-34, 35-39, 40-44, 45-50, 51-54 are pending.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed
> or described as set forth in section 102 of this title, if the differences between the
> subject matter sought to be patented and the prior art are such that the subject
> matter as a whole would have been obvious at the time the invention was made
> to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was
> made.

5.   Claims 26-28, 29, 35-39, 40-43, 45-47, 48, 51-54 are rejected under 35 U.S.C.

103(a) as being unpatentable over Laxman et al. (U.S.Patent No. 2003/0091032 A1) in

view of Bennai et al. (U.S.Patent No. 2002/0031112 A1).

Regarding to claim 1, see figures 7, figure 9, Laxman et al. discloses a call

processing system includes an access gateway (network access device) that has a

local switching unit (original location). The access gateway (network access device), in

operation, provides access to voice signals and data signals. The call processing

system also includes a call feature server (control component) that has a host interface

platform configured to connect to the access gateway (network access device) through

a network (data network). The call feature server, in operation, provides call control

functionality to the local switching unit (original location). The call feature server (control

component) is configured to provide bearer control signal (signaling portion) through a

packet network (data network) to establish a bearer channel (content portion) (see

abstract, figure 7); comprising:

- Transmitting the signaling packets (see page 2, [0017], the bearer control signal)

  from the first network access device (see figure 9, page 2, [0017], the access

  gateway 16) to a control component (see figure 9, page 2, [0016], the call feature

  server 12) via a data network (see figure 9, data network 18) (see page 2, [0016],

  the system includes connecting a network to call feature server "control

  component" having a host interface platform, connecting the network to an

  access gateway having a local switching unit and receiving a request to route a

  call from the access gateway) (see page 2, [0017], sending a bearer control

  signal includes sending the bearer control signal "signaling packets" from the

  access gateway 'the first network access device");

- Establishing, via the control component (see figure 9, page 2, [0019], call feature

  server 12) between the first network access device (see figure 9, the access

  gateway 16) and a second network access device (see figure 9, the access

  gateway 16) in responsive to receiving the signaling packets (see figure 9,

  [0019], the access includes a first ATM edge switch that connects the local

  switching unit to the network to receive control signals from the call feature

  server. The first ATM edge switch performs circuit emulation of control signal and

  routes bearer channels. The call feature server includes a second ATM edge

  switch that connect the host interface platform to the network, the second ATM

edge switching performing circuit emulation of control signal in tandem with the first ATM edge switch);

- Communicating the content packets (see page 2, [0016], bearer channel) from the first network access device (see page 2, [0019], the first ATM edge switch) to the second network access device (see page 2, [0019], the second ATM edge switch) over the establishing connection (see page 2, [0016] [0021] [0022] [0023]).

However, Laxman et al. is silent to disclosing encapsulating the content portion and the signaling portion of the communication via the first access device to provide a plurality of respective content packets and signaling packets.

See figure 2, Bennai et al. discloses receving, via a first access device, a communication comprising a content portion and a signaling portion in accordance with a QSIG access protocol; encapsulating the content portion and the signaling portion of the communication via the first access device to provide a plurality of respective content packets and signaling packets (see page 1, [0011], the invention therefore starts by setting up a call with no B channel can then by used to enable the two exchanges to interchange FACILITY messages relating to the call on the D channel and therefore to encapsulate signaling messages with a header corresponding to the Qsig-GF standard) (see fig.2, page 3, [0028], the microprocessor 21 launches a working session of the interface 23...the call set up with no B channel is set up via the D channel of the Qsig-GF bundle. In accordance invention, FACILITY messages are sent on the D channel by encapsulating the ISDN signaling).

Both Laxman, Bennai discloses a data network configured to communicate packets

of information intermediate an originating location and a terminating location. Bennai et

al. recognize encapsulating the content portion and the signaling portion of the

communication via the first access device to provide a plurality of respective content

packets and signaling packets. Thus, it would have been obvious to one of ordinary skill

in the art at the time of the invention to modify the system of Laxman with the teaching

of Bennai to provide encapsulating the content portion and the signaling portion of the

communication via the first access device to provide a plurality of respective content

packets and signaling packets in order to add information representing the order of the

packets to signaling packets sent over an Ethernet network.

6.   Regarding to claim 27, Laxman et al. discloses the establishing comprises

configuring the first network access device and the second network access device using

the control component to establish the connection via the data network (see figures 7, 9,

page 2, [0016], [0018], [0021], [0022], [0023]).

7.   In the claim 28, Bennai et al. discloses comprising mapping the signaling portion

from an QSIG access protocol to another signaling protocol, and communicating the

signaling portion to the second access device after the mapping (see page 1, [0011],

page 3, [0028]).

8.   In the claim 29, Laxman disclosing sending the signaling packets (control bearer

channel) from the first access device (see figures 7, 9, the access gateway 16) to a

control component (see figures 7, 9, call feature server 12) through a first D channel via

a data network (see page 2, [0016]);

Establishing, via a second D channel from the control component (see figures 7, 9, the

call feature server 12) to a second network access device (see figures 7, 9, the access

gateway 16) , a B channel connection (bearer channel) within data network between the

first network access device (see figures 7, 9, the access gateway 16) and the second

network access device (see figures 7, 9, the access gateway 16) (see page 2, [0019]

[0021]);

Communicating the content packets (bearer channel) from the first network access

device (see figures 7, 9, the access gateway 16) to the second network access device

(see figures 7, 9, the access gateway 16) over the establishing B channel connection

(bearer channel) (see page 2, [0016] [0021]).

However, Laxman et al. is silent to disclosing receiving a communication

comprising a QSIG content portion and a QSIG signaling portion; encapsulating the

QSIG content portion and the QSIG signaling portion of the communication, by a first

network access device, to provide a plurality of respective content packets and signaling

packets.

Bennai et al. discloses receiving a communication comprising a QSIG content

portion and a QSIG signaling portion; encapsulating the QSIG content portion and the

QSIG signaling portion of the communication, by a first network access device, to

provide a plurality of respective content packets and signaling packets (see page 1,

[0011], page 3, [0028]).

Both Laxman, Bennai discloses a data network configured to communicate packets

of information intermediate an originating location and a terminating location. Bennai et

al. recognize receiving a communication comprising a QSIG content portion and a QSIG signaling portion; encapsulating the QSIG content portion and the QSIG signaling portion of the communication, by a first network access device, to provide a plurality of respective content packets and signaling packets. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Laxman with the teaching of Bennai to provide receiving a communication comprising a QSIG content portion and a QSIG signaling portion; encapsulating the QSIG content portion and the QSIG signaling portion of the communication, by a first network access device, to provide a plurality of respective content packets and signaling packets in order to add information representing the order of the packets to signaling packets sent over an Ethernet network.

9.   In the claim 35, Laxman discloses receiving a signal packet including signaling information; establishing a bearer channel connection between a first network access device and a second network access device in response to receive the signal packet (see page 2, [0016] [0019] [0021]).

However, Laxman et al. is silent to disclosing QSIG signaling information.

Bennei discloses QSIG signaling information (see page 1 [0011] page 3, [0028]).\

Both Laxman, Bennai discloses a data network configured to communicate packets of information intermediate an originating location and a terminating location. Bennai et al. recognize QSIG signaling information. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Laxman with the teaching of Bennai to provide QSIG signaling information in order to add information

representing the order of the packets to signaling packets sent over an Ethernet

network.

10.   In the claim 36, Laxman discloses the received signal packet is transmitted from

a first network device (see figures 7, 9, the access gateway 16)to a control component

(see figures 7, 9, the call feature server 12) (see page 2, [0016], [0021]).

11.   In the claim 37, Laxman discloses the control component establishes the bearer

channel connection between the first network access device (the access gateway) and

the second network access device (see page 2, [0019] [0021]).

12.   In the claim 38, Laxman discloses transmitting content packets between the first

network access device and the second network access device (see page 2, [0016]

[0021]).

13.   In the claim 39, Laxman discloses the limitations of claim 35 above.

However, Laxman is silent to disclosing mapping the received QSIG signaling

information to another protocol prior to establishing the bearer channel.

Bennai discloses mapping the received QSIG signaling information to another protocol

prior to establishing the bearer channel (see page 1, [0011], page 3, [0028]).

        Both Laxman, Bennai discloses a data network configured to communicate packets

of information intermediate an originating location and a terminating location. Bennai et

al. recognize mapping the received QSIG signaling information to another protocol

prior to establishing the bearer channel. Thus, it would have been obvious to one of

ordinary skill in the art at the time of the invention to modify the system of Laxman with

the teaching of Bennai to provide mapping the received QSIG signaling information to

another protocol prior to establishing the bearer channel in order to add information representing the order of the packets to signaling packets sent over an Ethernet network.

14.   In the claim 40, Laxman discloses receiving a communication including a content portion and a signaling portion (see page 2, [0013] [0016]); transmitting the signaling packets to a control component for use in establishing a connection between the first network access device and a second network access device (see figures 7, 9, page 2, [0013] [0016] [0021] [0024]).

However, Laxman is silent to disclosing a QSIG communication; encapsulating the content portion and the signaling portion of the communication to provide a plurality of respective content packets and signaling packets.

Bennai discloses a QSIG communication; encapsulating the content portion and the signaling portion of the communication to provide a plurality of respective content packets and signaling packets (see page 2, [0011] page 3 [0028]).

   Both Laxman, Bennai discloses a data network configured to communicate packets of information intermediate an originating location and a terminating location. Bennai et al. recognize a QSIG communication; encapsulating the content portion and the signaling portion of the communication to provide a plurality of respective content packets and signaling packets. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Laxman with the teaching of Bennai to provide a QSIG communication; encapsulating the content portion and the signaling portion of the communication to provide a plurality of respective content

packets and signaling packets in order to add information representing the order of the packets to signaling packets sent over an Ethernet network.

15.   In the claim 41, Laxman discloses the limitations of claim 40 above.

However, Laxman is silent to disclosing the network access device receive the QSIG communication from a PBX switch.

Bennai discloses disclosing the network access device receive the QSIG communication from a PBX switch (see figure 2, page 1, [0011], page 3, [0028]).

Both Laxman, Bennai discloses a data network configured to communicate packets of information intermediate an originating location and a terminating location. Bennai et al. recognize the network access device receive the QSIG communication from a PBX switch. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Laxman with the teaching of Bennai to provide the network access device receive the QSIG communication from a PBX switch in order to add information representing the order of the packets to signaling packets sent over an Ethernet network.

16.   In the claim 42, Laxman discloses establishing a bearer channel connection between the first network access device and the second network access device (see page 2, [0016], [0019], [0021]).

17.   In the claim 43, Laxman discloses transmitting the content packet from the first network access device to the second network access device (see page 2, [0016] [0019] [0021]).

18.   In the claim 45, Laxman discloses a network access device configured to receiving a signal that contains a signal portion and content portion (see page 2, [0013] [0016] [0021]); transmit the signal packets to establish a communication channel to a second network access device (see page 2, [0016] [0019] [0021]).

However, Laxman is silent to disclosing receiving a QSIG signal; encapsulate the received signal portion into signal packets and the received content portion into content packets.

Bennai discloses receiving a QSIG signal; encapsulate the received signal portion into signal packets and the received content portion into content packets (see page 2, [0011] page 3, [0028]).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Laxman with the teaching of Bennai to provide receiving a QSIG signal; encapsulate the received signal portion into signal packets and the received content portion into content packets in order to to add information representing the order of the packets to signaling packets sent over an Ethernet network.

19.   In the claim 46, Laxman when transmitting the signal packets, the network access device is configured to transmit the signal packets to a control component via a data network (see figures 7, 9, page 2, [0016]).

20.   In the claim 47, Laxman discloses the communication channel is established through the data network (see figures 9, 7).

21.   In the claim 48, Laxman discloses the network access device is configured to transmit the content packets to the second network access device (see figures 7, 9, page 2, [0019]).

22.   In the claim 51, Laxman discloses a control component (see figures 7, 9, the call feature server 12) configured to receive a signal packet; and establish a bearer communication channel between a first network access device and a second network access device using the received signal packet (see page 2, [0016] [0019] [0021]). However, Laxman et al. is silent to disclosing a signal packet that includes QSIG information.

Bennai et al. discloses a signal packet that includes QSIG information (see page 1, [0011]).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Laxman with the teaching of Bennai to provide a signal packet that includes QSIG information in order to to add information representing the order of the packets to signaling packets sent over an Ethernet network.

23.   In the claim 52, Laxman discloses the control component receives the signal packet from the first network access device (see page 2, [0016]).

24.   In the claim 53, Laxman discloses map (see page 2, [0024], conversion) received signal packet to another protocol for transmission to the second network access device.

25.   In the claim 54, Laxman discloses return the bearer channel to an idle state after transmission of content packets from the first network access device to the second network access device (see page 2, [0021]).

Claim Rejections - 35 USC § 103

26.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

27.   Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over the

combined system (Laxman – Bennai) in view of Lampa (US 2003/0016681 A1).

In the claim 44, the combined system (Laxman – Bennai) discloses the limitations of

claim 40 above.

However, the combined system (Laxman – Bennai) is silent to disclosing the second

network access device is a non-QSIG device.

Lampa discloses the second network access device is a non-QSIG device (see figure

1).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the

invention to modify the combined system (Laxman – Bennai) with the teaching of

Lampa to provide the second network access device is a non-QSIG device in order to

transport of the QSIG signaling over the PSTN is accomplished by enveloping QSIG

mssages with ISUP (ISDN User part) messages.

Claim Rejections - 35 USC § 103

28.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

29.   Claims 30- 34, 49-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined system (Laxman – Bennai) in view of Abel et al. (U.S.Patent No. 6,950,426 B2).

In the claim 30, the combined system (Laxman – Bennai) discloses the limitations of claim 29 above.

However, the combined system (Laxman – Bennai) is silent to disclosing the first and second D channel are implemented as virtual circuits.

Abel et al. discloses the first and second D channel are implemented as virtual circuits (see col. 2, lines 50-60).

Both Laxman, Bennai, and Abel discloses the signaling of the private brand exchange PBX-A, PBX-B. Abel recognizes the first and second D channel are implemented as virtual circuits. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system (Laxman – Bennai) with the teaching of Abel to provide the first and second D channel are implemented as virtual circuits in order to supported by private branch exchanges via a packet oriented.

30.   In the claim 31, the combined system (Laxman – Bennai) discloses the limitations of claim 29 above.

However, the combined system (Laxman – Bennai) is silent to disclosing the B channel is implemented as a virtual circuit.

Abel et al. discloses the B channel is implemented as a virtual circuit. (see col. 2, lines 50-60).

Both Laxman, Bennai, and Abel discloses the signaling of the private brand

exchange PBX-A, PBX-B. Abel recognizes the B channel is implemented as a virtual

circuit. Thus, it would have been obvious to one of ordinary skill in the art at the time of

the invention to modify the combined system (Laxman – Bennai) with the teaching of

Abel to provide the B channel is implemented as a virtual circuit in order to supported by

private branch exchanges via a packet oriented.

31.   In the claim 32, Laxman discloses the received communication is transmitted

from a first PBX switch (see figures 7, 9, page 2, [0019]).

32.   In the claim 33, Laxman discloses the second network access device is

transmitted the content packet to a second PBX switch (see figures 7, 9, page 2,

[0019]).

33.   In the claim 34, the Laxman discloses the limitations of claim 29 above.

However, Laxman is silent to disclosing the QSIG content portion and a QSIG

signaling portion are continuous signals.

Bennai discloses the QSIG content portion and a QSIG signaling portion are

continuous signals (see page 2, [0023]).

Both Laxman, Bennai discloses a data network configured to communicate packets

of information intermediate an originating location and a terminating location. Bennai et

al. recognize the QSIG content portion and a QSIG signaling portion are continuous

signals. Thus, it would have been obvious to one of ordinary skill in the art at the time of

the invention to modify the system of Laxman with the teaching of Bennai to provide the

QSIG content portion and a QSIG signaling portion are continuous signals in order to

add information representing the order of the packets to signaling packets sent over an

Ethernet network.

34.   In the claim 49, claim 49 is rejected the same reason of claim 34 above.

35.   In the claim 50, claim 50 is rejected the same reason of claim 32 above.

36.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to CHUONG T. HO whose telephone number is (571) 272-

3133. The examiner can normally be reached on 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

06/20/06

HUY D. VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600